December 11, 2003

Mr. Honorable Michael K. Powell
Chairman
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: In the Matter of
Mitigation of Orbital Debris
Written *Ex Parte* Presentation
IB Docket No. 02-54

Dear Chairman Powell:

The Satellite Industry Association ("SIA") wishes to express its concern regarding a discrete, but important, aspect of the Commission's rulemaking proceeding addressing Mitigation of Orbital Debris.[1] Although SIA has a number of concerns about the Orbital Debris proceeding, this letter focuses solely on one issue, a proposal to require geostationary ("GSO") satellites operating in the Mobile-Satellite Service ("MSS") to maintain a longitudinal (East-West) station keeping tolerance of 0.05°, rather than the currently permitted tolerance of 0.1°.[2]

SIA urges the Commission to refrain from adopting such a rule because it is unnecessary for the safe and effective operation of GSO MSS spacecraft and will significantly increase the costs of operating GSO MSS satellites. According to the *Notice of Proposed Rulemaking* ("*NPRM*"), the Commission is considering the restriction as "rules of the road" for the purpose of limiting the probability of in-orbit collisions.[3]

---

[1] *Mitigation of Orbital Debris,* Notice of Proposed Rulemaking, IB Docket No. 02-54 (March 18, 2002) ("*Orbital Debris NPRM*").

[2] *See id.*, ¶ 47.

[3] *Id.*

SIA is unaware of any evidence that an appreciable risk exists of a collision between GSO satellites operating with a 0.1° longitudinal station keeping tolerance. No evidence of such a risk is identified by the *NPRM*, or in the various comments that were filed in this proceeding.[4] Instead, the *NPRM* acknowledges that "extremely low spatial density" exists in the current satellite spacing environment, along with an equally low risk of collision between controlled objects.[5] Although the number of satellites in space continues to increase, the technology for tracking and maneuvering spacecraft has also improved, obviating the need for tighter station keeping requirements for GSO MSS spacecraft.

SIA acknowledges that the Commission's rules currently require GSO satellites operating in the Fixed Satellite Service ("FSS") to maintain a 0.05° longitude station keeping tolerance.[6] As the *NPRM* acknowledges, however, the restriction on FSS satellites was adopted solely "for the purpose of avoiding harmful radio interference" between FSS satellites.[7] The Commission created the rule for FSS satellites in response to concerns that FSS networks operating in a 2° spacing environment would need the stringent longitude station keeping requirement in order to avoid harmful interference between adjacent networks.[8]

No such interference risk exists for MSS satellites. Not only would a more stringent station keeping tolerance be unnecessary, but it would also be very expensive for operators of MSS satellites, greatly increasing the amount of fuel that must be expended to maintain a tighter tolerance, significantly reducing the expected life of satellites and potentially increasing the costs of MSS services for consumers.

The Commission recently addressed this identical issue with respect to longitudinal station keeping requirements for GSO satellites operating in the Direct Broadcast Satellite ("DBS") service.[9] The Commission considered and rejected the possibility of imposing a more

---

[4] The only party that appears to have filed substantive comments on the station keeping issue was Telesat Canada, which acknowledged that "[i]t may not be necessary to control all geosynchronous satellites to the same precise requirements, but in Telesat's view it is important that all have published control limits which are maintained." *Comments of Telesat Canada*, IB Docket No. 02-54, at 7 (July 17, 2002). A Commission rule that requires GSO MSS satellites to publish and maintain a 0.1° station keeping tolerance would satisfy Telesat's concern.

[5] *Orbital Debris NPRM*, ¶ 50.

[6] The text of subsection 25.210(j) does not expressly indicate that it is applicable solely to FSS satellites. The title of Section 25.210 – "Technical Requirements for Space Stations in the Fixed-Satellite Service" – makes clear, however, that the rule applies only to FSS space stations. Furthermore, the *NPRM* acknowledges the limited scope of the rule, stating that it applies only to FSS satellites. *See Orbital Debris NPRM*, ¶ 47.

[7] *Id.*

[8] *See Amendment of Part 25 of the Commission's Rules and Regulations to Reduce Alien Carrier Interference Between Fixed-Satellites at Reduced Orbital Spacings and to Revise Application Processing Procedures for Satellite Communication Services*, Second Report and Further Notice of Proposed Rulemaking, 8 FCC Rcd 1316, FCC 93-38, ¶ 19 (March 4, 1993).

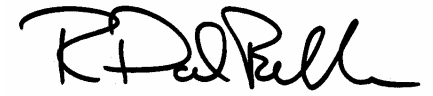
[9] *See Policies and Rules for the Direct Broadcast Satellite Service*, Report and Order, IB Docket No. 98-21 (June 13, 2002) ("*Part 100 DBS Order*"); *see also Orbital Debris NPRM*, ¶ 47 n.89 (acknowledging that the Commission is currently in the process of revising its rules for DBS by consolidating them with the Part 25 rules for other satellite services).

stringent station keeping requirement on DBS operators, acknowledging concerns raised by the DBS industry[10] and apparently concluding that the public interest would be better served by permitting DBS satellites to continue to maintain a 0.1° longitudinal station keeping tolerance in accordance with Appendices 30 and 30A of the ITU Radio Regulations.[11] The Commission reached this conclusion even though DBS feeder links, like MSS feeder links, are often treated as FSS services for regulatory purposes.[12]

The same result would be appropriate for GSO MSS networks. The Commission should continue to permit GSO MSS satellites to maintain a 0.1° longitudinal station keeping tolerance. No evidence has been presented that a tighter station keeping tolerance is necessary in order to avoid in-orbit collisions, or to prevent harmful interference. Instead, adoption of such a rule would serve only to increase operating costs for GSO MSS networks at a time when the MSS industry is working hard to bring new services to consumers throughout the United States.

Thank you for your attention to this matter. Please let us know if you have any questions.

Sincerely,



Richard DalBello
President

CC: Commissioner Abernathy
Commissioner Copps
Commissioner Martin
Commissioner Adelstein
Bryan Tramont
Sheryl Wilkerson
Jennifer Manner
Paul Margie
Sam Feder
Barry Ohlson
Thomas Tycz
Karl Kensinger
John Martin
Stephen Duall
Marlene H. Dortch, Secretary

[10] *See id.*, ¶ 105 (*citing Reply Comments of Echostar Communications Corp.*, IB Docket No. 98-21 (April 21, 1998)).

[11] *See* 47 C.F.R. § 25.148(f) (2002).

[12] *See Part 100 DBS Order*, ¶ 117 n.395.